Big Bend National Park 2004 Annual Report
Prepared by the James E. 'Bud' Smith Plant Materials Center

Introduction

The original agreement with Big Bend National Park and the James E. `Bud' Smith Plant Materials Center (PMC) was developed and signed in 1989. Early agreements involve seed and/or plant collection at the Park and seed increase at the PMC. Materials produced were used for roadside revegetation within the park. Plant materials (seeds) were drilled and/or broadcast along road shoulders following construction. The first agreement was completed in 1993. The second agreement scheduled for completion in 1997 was modified to incorporate an additional study to look at techniques for road slope revegetation. In 1998 an additional agreement was put into place to provide materials for the next phase of road construction. This agreement originally scheduled from 1998 - 2001 was amended in 1999 and placed on hold through 2001, pending the rescheduling of construction activities. Currently there are no active agreements targeting roadside revegetation projects.

In 2001 a new agreement was prepared between the Park and PMC addressing the need to revegetate areas after removal of invasive plants. Several new plant species will be looked at to determine if seed production fields can be developed.

Accomplishments:

Since 1989 nine different species have been produced for the park and three species are being looked at to determine production and propagation techniques.
At the end of 2004, the park had received a total of 2380 bulk pounds of seed totaling 983 PLS lbs.

Seed Production and Available Inventory

Common Name	Area(ac)	2004 Prod./Lbs *	PLS Inventory On Hand
Alkali sacaton	-	-	329.0
Sideoats grama	-	-	186.0
Green sprangletop	-	-	392.0
Cane bluestem	.50	15	37.0
Showy menodora	.50	-	238.00
Whiplash pappusgrass	increase	.60	.30
Chino grama	.75	4.00 **	29.0
Tobosa	.10	1.25	increase
Limoncillo	-	-	29.0 *

* bulk material wt.
** new production field

Conclusion:

At the end of FY 2004 seed production fields being maintained and harvested included showy menodora, cane bluestem, and Chino grama. The center will continue to work with and develop the *Hilaria mutica*, tobosagrass increase field. In 2003, seeds of *Scleropogon brevifolius*, burrograss, and *Pappophorum vaginatum*, whiplash pappusgrass were planted to investigate the possibilities of field seed production. The burrograss failed to establish and the whiplash pappusgrass is undergoing small scale seed increase. The agreement signed in 2001 addressing post weed control revegetation expired in 2004.